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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/557,997	04/24/2000	Ganesh Venkataraman	M0656/7055 (HCL)	7686
23628	7590	01/26/2005	EXAMINER	
WOLF GREENFIELD & SACKS, PC FEDERAL RESERVE PLAZA 600 ATLANTIC AVENUE BOSTON, MA 02210-2211			SMITH, CAROLYN L	
			ART UNIT	PAPER NUMBER
			1631	

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/557,997

Applicant(s)

VENKATARAMAN ET AL.

Examiner

Carolyn L Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2004 and 03 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 36,37 and 54-72 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 36,37 and 54-72 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission, filed 9/1/04 and 11/3/04, have been entered.

Amended claim 36, filed 11/3/04, is acknowledged.

Claims herein under examination are 36-37 and 54-72.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 36-37 and 54-72 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 36 (lines 12 and 18) recites the phrase "based on" which is vague and indefinite. It is unclear what parameters and to what degree these parameters must be met so that they are considered to be "based on". Clarification of the metes and bounds of this phrase via clearer claim wording is requested. Claims 37 and 54-72 are also rejected due to their direct or indirect dependency from claim 36.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 36, 54-55, 57, 61-62, 65, and 69 are rejected under 35 U.S.C. 102(e)(2) as being anticipated by Filvaroff et al. (P/N 6,734,288 B2).

Filvaroff et al. disclose a method of comparing amino acid sequences for matches between a query sequence with a given sequence (first and second data structures) using (tangibly embodied) computer programs ALIGN-2 or NCBI-BLAST-2 (col. 23, lines 9-33; col. 27, lines 30-63) which represent computer readable media. Filvaroff et al. disclose using BLAST and FastA sequence alignment (col. 68, lines 15-18) which represents a user providing input into one or more fields, as stated in step (A) of instant claim 36. Filvaroff et al. disclose using antigen-complexes (col. 6, lines 5-6; col. 31, lines 29-30; col. 31, lines 39-42; col. 95, lines 62-64). According to the Merriam-Webster online dictionary, “antigen” is defined as a usually protein or carbohydrate substance. According to the Merriam-Webster online dictionary, “carbohydrate” is defined as any of various neutral compounds, such as sugars (or saccharides, according to the Merriam-Webster online dictionary. Thus, the antigen-complexes represent monosaccharides or disaccharides of a polysaccharide, as stated in instant claim 36. PRO

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followed by a number identifies a polypeptide (col. 21, lines 3-7) which represents a numerical identifier, as stated in instant claim 55. Figures 2 (lines 3-4) and 4 (lines 2-3) represent examples of identifiers that include one or more fields as well as values corresponding to the sequence listed, as stated in instant claim 36. Filvaroff et al. disclose using masking options on repetitive sequences to return a masked query sequence (col. 24, line 30; col. 107, lines 46-55), which represents generating at least one mask based on the values stored in one or more fields of the first data structure, as stated in instant claim 36. "Binary operation" is not succinctly defined in the instant specification. As Webster's II New Riverside Dictionary defines "binary" to be composed of two different parts, the calculation of 100 multiplied by X/Y where X is an amino acid score and Y is the total number of amino acid residues in a sequence (col. 23, lines 34-46) represents a type of two part mathematical operation to generate a result, as stated in instant claim 36. Tables 2 and 3 demonstrate how to calculate the percent amino acid sequence identity (col. 23, lines 52-61 and col. 67, lines 1-25) which represents monosaccharide or disaccharide matches (including a property) based on at least one result when the sequences in question are from antigen-complexes, as mentioned above, as stated in instant claim 36 and 69. The percent identity represents a value corresponding to a property, as stated in instant claims 61 and 62. Figure 2, line 4, lists the MW number which represents the molecular weight of a query sequence, as stated in instant claim 65. "Non-character based field" is not specifically defined in the instant specification, but the specification gives examples of values as either a binary or decimal value. Therefore, Filvaroff et al. disclose in Figure 2 (line 4) a value in the pI field which is a decimal value or non-character based field, as stated in instant claims 54 and 57.

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Thus, Filvaroff et al. anticipates the limitations in instant claims 36, 54-55, 57, 61-62, 65, and 69.

Conclusion

No claim is allowed.

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center. The faxing of such papers must conform to the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR §1.6(d)). The Central Fax Center number for official correspondence is (571) 273-8300.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn Smith, whose telephone number is (571) 272-0721. The examiner can normally be reached Monday through Thursday from 8 A.M. to 6:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel, can be reached on (571) 272-0718.

Any inquiry of a general nature or relating to the status of this application should be directed to Legal Instruments Examiner Tina Plunkett whose telephone number is (571) 272-0549.

January 24, 2005

Ardin J. Marschel 1/24/05
ARDIN J. MARSCHEL
SUPERVISOR